SYNONYMICAL AND OTHER NOTES ON COLEOPTERA.

BY THOS L. CASEY, WASHINGTON, D. C.

The fact that some important catalogues of the Coleoptera of the world are about to be published, renders it desirable to afford all the aid possible to the compilers of these lists, by making known such apparent synonymy relating to published species, as may have come to light since their appearance in the literature of the subject. The writer has therefore endeavoured to do his part, as far as the course now seems clear and evident to him, in the following notes.

The recent catalogue of the Staphylinid genera by Dr. Eichelbaum (Mem. Soc. Ent. Belg., XVII) is a very welcome summary, although personally, my position is undesirably conspicuous in regard to the number of generic names proposed, and I had hoped to be overshadowed in this respect by some other specialists in the family. A reduction of the number ascribed to the writer is therefore in order, although some already reduced to synonymy, such as *Eumitocerus* Csy., which is a synonym of *Trichophya*, are restored by Dr. Eichelbaum inadvertently, and one, at least, reduced by the compiler, i.e. *Myrmobiota*, will have to be restored to full generic rank, as it has very little to do with *Homœusa*. Dr. Eichelbaum would also have done well to place *Liparocephalus* in the Aleocharinæ near *Phytosus*, which is its true systematic position.

In regard to emendations, the author has been very liberal; but, in my opinion, no generic word should be emended at all. Generic words are not a part of language to any greater extent than the x, y, z of algebra. They are merely pronounceable symbols formed by combinations of letters, although in many cases their derivation, or intended derivation, from certain words, either of classic or barbaric origin, is sufficiently evident. Not being strictly a part of language however, they should be withdrawn from rules of etymology, in order to protect them from possible emendators of diverging views;—that is if stability in the fundaments of nomenclature is to be maintained. It is highly desirable, and ought to be compulsory, that the generic symbol should have an ending conforming to the Latin language, in order to determine gender in the specific word; but just how such a rule could be enforced is rather difficult to imagine. In the fixing of gender for species names the general Latin rule should be applied, but without those exceptions which always occur in actual

language. The word *Ilaus*, for example, when used as a generic symbol is merely a combination of letters without meaning, and the species names should be given the masculine ending. So, genera ending in *soma* or *derma* should have the feminine ending in the specific names, without regard to the gender of such words in the Greek. Generic symbols, even if considered a part of language, could not be Greek, but, as soon as taken into the nomenclatorial scheme, become Latin, which should be the sole source of specific words. These species names always have a meaning and therefore assume a different status from generic symbols; they can and should be altered if necessary to give the meaning intended by their author.

Looking through the pages of this catalogue I would propose the following changes:

Hyptioma Csy., p. 162, is a synonym of *Holisus* Erichs.; the species *Cubensis* seems however to be valid. This error in the generic name indicates one of the disadvantages of working without full literature at hand, as the writer has been forced to do on many occasions; but, in this case, although resulting in a synonym, there is a certain advantage in having a perfectly independent estimate of the systematic position of the genus, which seemed to be a Xantholinid and not closely related to the *Cafius* series.

The genera *Terasota* and *Taphrodota*, p. 242, are subdivisions of *Aloconota*.

Euromota, p. 242, and *Anepsiota*, p. 236, are valid subgenera of *Athtta*, as this genus is supposed to be constituted by recent authors. I do not agree with those who place so many heterogeneous elements under the genus *Atheta*, and believe that the ideas expressed in the older catalogue of Heyden, Reitter and Weise are far nearer to the truth. There such names as *Acrotona*, *Liogluta*, *Aloconota*, *Autalia* and some others, stand for genera in the full sense of the word, each with numerous subgenera.

Macroterma, p. 242, is a valid subgenus of *Atheta* in its comprehensive sense. The species *dentata*, of Bernhauer (*Atheta*), is smaller and narrower than *alutacea* Csy., and the two are not very closely related.

Homalotusa, p. 242, is also a subgenus of *Atheta*, near *Liogluta*.

Elytrusa, p. 235, may or may not be the same as *Megista*, for I am by no means certain that the type is identical with the type of *Megista* Rey; it however is at best a subgenus, very closely allied to *Megista*.

Achromota, p. 254, does not belong to the Aleocharini but to the Myrmedoniini and is a synonym of *Acrotona*.

Eurypronota, p. 235, is a valid subgenus of *Atheta* near *Acrotona*. If the present *Atheta* were properly divided generically, it would be a subgenus of *Acrotona*.

Colposura, p. 236, and *Valenusa*, p. 242, are valid gubgenera of *Atheta* near *Amischa*. *Amischa* is really a valid genus, of which the two mentioned might be regarded as subgenera.

Athetota, p. 236, is a synonym of *Anepsiota*.

Platyusa, p. 223, is a synonym of *Myrmedonia*. This synonym was announced many years ago, but was overlooked by Dr. Eichelbaum. (See Ann. N. Y. Acad. Sci, VII, p. 322).

Nototaphra, p. 222, has dorsal sexual tuberosities of the male abdomen similar to those of *Myrmœcia;* but it differs in the formation of the sterna between the middle coxæ, in the very fine close punctures of the upper surface and in the smaller basal joint of the antennæ. If *Myrmœcia* be regarded as a subgenus of *Myrmedonia*, *Nototaphra* would be another subgenus ; if, however, *Myrmœcia* is a distinct genus, as I hold to be true, then *Nototaphra* is also distinct.

Myrmobiota, p. 250, is a genus wholly distinct from *Homœusa*, and has a markedly different habitus. The specimen sent to Dr. Wasmann by Mr. Wickham under that generic name, and upon which the former gained his opinion of *Myrmobiota*, was certainly *Homœusa* and not *Myrmobiota*. I have never seen this specimen. *Soliusa*, p. 250, might be regarded as a subgenus of *Homœusa*, but its type, *crinitula*, bears not the slightest resemblance to *Myrmobiota*, and has only a general similarity with the type of *Homœusa*. Dr. Eichelbaum should certainly make these corrections in the interest of truth.

The above notes will determine certain points which could not very well be settled, because of the isolated nature of the descriptions. There are, however, many names which I have published as genera in systematic work, such as those under the comprehensive genus *Aleochara* and under *Falagria*, the weight of which as genera or subgenera can be determined very well from the context. Very recent writers will probably be disposed to hold them for the most part as subgenera, but I am sure that more painstaking study would convince them that they are in great part true genera. It can only be said that for the present their systematic weight is a subject of disagreement.

Some years ago, in the CANADIAN ENTOMOLOGIST, I explained that the generic name *Delius* Fauv., p. 194 (Rev. d'Ent., 1899, p. 11), is preoccupied by *Delius* Csy., in the Scydmænidæ (Ann. N. Y. Acad. Sci., 1897, p. 497); as no substitution has been made for the Fauvelian name, I would propose *Deliodes* (nom. nov.) for the *Delius* of Fauvel.

The following are some additional synonymic notes on the Staphylinidæ:

The *Ocyusa asperula* Csy., (Ann. N. Y. Acad. Sci., 1893, p. 305) appears to have been redescribed by Dr. Bernhauer under the name *brevipennis*.

Aleochara Kansana Csy., (Tr. Acad. Sci., St. Louis, 1906, p. 141) is a synonym of *ellipsicollis* Csy. (l.c., p. 142).

After *Baryodma castaneipennis* (l.c., p. 152) read Mann., instead of "Esch."

The name *Baryodma dentriventris* Csy., (l.c., p. 158) is preoccupied by Bernhauer, and I would therefore substitute for it the name *Humeëlatti* (nom. nov.).

Eucharina rugosa Csy., (l.c., p. 166) may be regarded as a synonym of *sulcicollis* Mann.

Echochara lucifuga Csy., (l.c., p. 177) originally placed in *Rheochara* (Ann. N. Y. Acad. Sci., 1893, p. 288) was redescribed by Garman (Psyche, 1894, p. 81) under the name *Calodera cavicola*.

The subgeneric name *Tachyusilla* Csy., (l.c., p. 213) is a synonym of *Caliusa* Rey.

Lissagria minuscula Csy., (l.c., p. 254) is a subspecies of *robusta* Csy.

Falagriota lucida Csy., (l.c., p. 257) is a synonym of *occidua* Csy.

After *Gyrophæna flavicornis*, (l.c., p. 291) for "n. sp." read Mels.

Homalotusa pallida (l.c., p. 342) is a synonym of *fuscula* Csy.

In the latest European catalogue of Heyden, Reitter and Weise, the genus which I called *Eulissus* Mann., (l.c., p. 379), is named *Gauropterus* Thoms.; but in the catalogue of Dr. Eichelbaum this decision is reversed, *Gauropterus* being given as a synonym of *Eulissus*. There is some obscure point to be cleared up here, it would seem.

Leptacinus rubricollis Csy., (l.c., p. 400) is preoccupied by Reitter (1899); but, as these names may possibly apply to what might be regarded as a single species, I hesitate to substitute another name at the present time.

Diaulota insolita Csy., (Ann. N. Y. Acad. Sci., VII, 1893, p. 355) is a synonym of *densissima* Csy.

After *Lathrobium amplipenne* (Tr. Acad. St. Louis, XV, p. 81) insert "n. sp."

The substitution of *Astenus* Steph., for *Sunius* Erichs., is one of those rigorous applications of the laws of priority which it is very difficult to adopt with any degree of complacency, because, throughout almost the entire literature of the subject, the genus has been known under the name *Sunius*, and, in this special case, because the word *Astenus* is very misleading if we look at it etymologically. There are some other iconoclastic changes of names, especially in the Pselaphidæ, which seem to be equally unnecessary. I believe fully in the law of priority, but do not think it can be made quite so rigid as the law of gravitation; and, that when a name has become established through very long and extensive usage, in fact universally employed, it should not be changed unless there can be no shadow of doubt as to the necessity for doing so, and of this we should be made aware by the publication, coincidentally with the proposed change, of all the facts and original descriptions which apparently compel it, so that everyone may be enabled to form his own opinion.

The following notes synonymic and otherwise are appended:

SCYDMÆNIDÆ.

Eumicrus cruralis Csy., (Ann. N. Y. Acad., IX, p. 534) is a synonym of *ochreatus* Csy.

COCCINELLIDÆ.

In a paper published recently by the writer (Can. Ent., XL, p. 393) a few errors and misprints occur which require correction as follows:

On pp. 397, 400 for "*liliputana*" read *lilliputana*.

On p. 399, 19 l. from bottom, for "met-episterna" read met-epimera.

On p. 400, 4 l. from top, for "*parenthesis*" read *apicalis*.

On p. 409, 3 l. from top, for "*cacti*" read *plagiatum*.

On p. 413. The species described under the name *Brachyacantha metator* does not belong to that genus, but is a member of the genus *Hyperaspis*, belonging near *jocosa* and *Leprati*, which have a habitus so nearly that of *Brachyacantha* that it did not occur to me to examine the anterior legs.

Scymnus subsimilis Csy., (Journ. N. Y. Ent. Soc., VII, p. 150) is a synonym or slight variety of *aridus* (l.c., p. 146).

Scymnus Calaveras Csy., (l.c., p. 150) may be regarded as a synonym of *tenuivestis* (l.c., p. 151).

BUPRESTIDÆ.

In my recent paper (Proc. Wash. Acad. Sci., XI) on p. 49, line 22 from top, and again on p. 115, line 15 from top, for "*ornata*" read *decora*.

TENEBRIONIDÆ.

Metoponium laticolle and *faustum* Csy., (Proc. Wash. Acad. Sci., IX, pp. 291, 292) are subspecies of *abnorme* Lec.

Metoponium congruens and *anceps* Csy., (l.c., pp. 293, 294) may be regarded as subspecies of *perforatum* Csy.

Metoponium subsimile Csy., (l.c., p. 295) is a subspecies of *socium* Csy.

Steriphanus alutaceus and *peropacus* Csy., (l.c., pp. 348, 349) are probably slight varietal or racial forms of *subopacus* Horn.

Steriphanus unicolor Csy., (l.c., p. 346) is not more than a subspecies of *convexus* Lec.

In describing the elytra of *Bothrotes pertinax* Csy., (l.c., p. 405) it is stated that the impressed lines are wanting except apically; this is a mistake, due probably to inadvertently observing some other specimen, for, in the type of *pertinax*, the impressed lines are very well developed.

Metopoloba contaminans Csy., (l.c., p. 418) is a synonym of *sublæviceps* Csy.

On p. 463 (l.c.), it is stated that my description of *Zopherus Haldemani* is apparently the first full diagnosis to be published, but this is an error, as the species had been satisfactorily described by Horn many years before, under the name *Z. nodulosus*, Sol.

Phlœodes latipennis Csy., (Can. Ent., 1907) is a synonym of *pustulosus*, Lec.

Additional specimens of *Nyctelia robustus* Lec., (Proc. Wash. Acad. Sci., X, p. 59), recently received, show that the elytra are not polished on the apical declivity in all examples, but in some are opaque throughout; evidence seems to indicate that the entirely opaque individuals are males.

The recent paper on *Diplotaxis*, by Mr. Fall (Tr. Am. Ent. Soc.), answers a want long felt in a genus which has been almost as much of an enigma as *Brachynus*, so far as the identification of species is concerned.

The annoyance caused by the numerous, and at times rather obtrusive, misprints, which have come to be somewhat characteristic of its medium of publication, is offset to some extent by the more satisfactory typographic form, the new dress being more becoming than the old. I notice that Mr. Fall makes use of a word *umbone*, to express a protuberanee of the surface; this word also occurs frequently in the writings of Dr. Horn and others. On consulting the dictionaries, I find that the word *umbo*, which has been adopted by the English language directly from the Latin, has, for a French equivalent, *umbon* and Italian *umbone;* but it is not quite apparent why we should use the Italian word in preference to the Anglo Latin *umbo*, which is shorter, more rational and less liable to be mistaken for an English singular of the Latin plural *umbones*, if perchance construed as forming two syllables instead of three.

It is also impossible to confirm the correctness of the geographic name "Baboquivaria" used by Mr. Fall and others. The atlases give either Baboquivari or Babuquivari, the latter form in Steiler's Handatlas. The form "Baboquivaria" is only quotable from the pin-labels of our genial and old-time friend Prof. Snow, and was presumably so printed under misapprehension.

It would seem to be almost time that the true value of the synonymical list of my early species published by Dr. Horn, and embodied in the Henshaw List, should have become known to systematists. I drew attention to the unreliability of this list in one of my papers published in the Bulletin of the California Academy, and it would be scarcely worth while to allude to it again, were it not necessary to remark that in blindly following the synonymy indicated by Dr. Horn, the author of the work on *Diplotaxis* has fallen into an error, which he might have avoided had he read my description of *D. levicula*, and not taken it for granted that it was, as stated by Dr. Horn, identical with the *punctata*, of LeConte, inhabiting a different region : for Mr. Fall does not admit that *punctata* occurs in Arizona, and yet places *levicula*, from Arizona, as a synonym of that Texan species. On comparing my type with LeConte's material many years ago, I made up my mind that it was closely related to *carbonata*. A perusal of Mr. Fall's paper indicates that he has redescribed it under the name *rufiola*. This name is therefore in all probability a synonym of *levicula*.

In Mr. Fall's Revision of the Ptinidæ (Tr. Am. Ent. Soc, XXXI, p. 274), the author has apparently strained pretty hard to make a synonym

of my *Cenocara occidens*, and it is almost needless to say that he is in error. *Occidens* is one of the smallest known species of *Cenocara* and is always pale brownish-testaceous in colour. I compared it carefully with the actual type of *Californica* Lec., and the two have no mutual resemblance whatever, *Californica* being much larger and black in colour, as stated by LeConte. The pubescence may have given it a brownish tinge to Mr. Blanchard, but the integuments are black.

In his treatment of my *Ptilinus flavipennis*, in this paper (p. 281), Mr. Fall also displays a decided lack of liberality in the absence of positive knowledge, for it is true beyond any legitimate question, that *Ptilinus flavipennis* is not a synonym of *basalis* Lec., but is a separate and distinct species.

It is seldom that I have attempted to assume the role of critic of the work of my fellows in the field of morphological classification, although frequently being forced to defend my own work from attack, when the motive therefor seemed unjust or the reason ill founded. Having done so much work himself in this field, the writer feels only too acutely the uncertainty of the results of our labours and of our helplessness in the presence of the undecipherable; for we know not a whit of the meaning or origin of it all. The recent work of Dr. F. E. Blaisdell on the genus *Eleodes* tempts me, however, to make a few observations, which I trust will be taken in good part, as they are given in a spirit wholly friendly to the author and in no way as captious criticism.

This work stands alone in the minute and careful study bestowed upon the subject and in its remarkable array of detail. Its degree of departure from the actual truth, so far as indicating the total number of species and subspecies which the author had before him is concerned, is of course a part of his own individual perceptiveness and methods of reasoning and would be viewed differently by every investigator; no two would probably agree, but I think it can be truly said that Dr. Blaisdell has tried to steer an ultra-conservative course, and that in his inner conscience he really felt that there were many more forms that should be given places in the taxonomic scheme than he quite dared to make known. This can be inferred, at least, from the fact that so many species or subspecies are presented to us under the term "*forma*," which he modestly states are not to be perpetuated in the catalogue but are only intended as convenient

references ; but if he did not think that many of them would be perforce adopted, he could much more simply have stated *forma A*, *forma B* and so on. As a matter of fact, it is these *formas* that have prompted me to write this notice, for it is very difficult to understand how some of them can fail to find their way into the catalogue as legitimate taxonomic units, such for instance as *Farallonicus* under *parvicollis*, *Catalinæ* under *omissus*, *interstitialis* under *carbonarius*, *annectans* under *obsoletus*, *ordinatus* under *pilosus* and in many other similar cases. Indeed it becomes evident that these *formas*, which in many instances have been given perfectly distinctive and proper names, may produce much trouble and confusion, and I would strongly advise the author to issue a supplement in which he definitely states which of them he would have perpetuated as subspecies and which are to be conclusively dropped ; for that they all have the status at least of subspecies cannot for a moment be held in dispute, when we view such conservatism as prompted him to write *porcatus* as a variety of *obsoletus*, or *brunnipes* as a variety of *pimelioides*, instead of giving them their evidently proper status as distinct species.

In this connection it should be stated that *compositus* Csy., is by no means a form of *hispilabris*, as was in fact admitted by the author himself when he viewed the type in my collection, though unfortunately not until after his monograph had appeared in print. It is a wholly distinct and isolated species, not closely related in any way to *hispilabris*, and this remark can be repeated in regard to *elegans* Csy., an isolated species referred by Dr. Blaisdell to *dentipes*, which it does not in the least resemble.

The amount of conscientious work made obvious by the extremely detailed account of the sexual characters, is most unusual in systematic studies of this kind; but, although a very interesting contribution to morphology, it must be held to be of comparatively little practical utility in determining species ; to even thoroughly understand it, one would be compelled to devote almost as much time to painstaking dissection as that expended by the author himself.

In conclusion there are but two other points which might be alluded to in reluctantly criticising this voluminous monograph, the first relating to the title, which is so lengthy as to be objectionable to the bibliographers ; it is a mistake to try to describe the scope of a paper so minutely in the title itself. The second relates to the gender given the specific names,

which, to follow the general rule for genera ending in *edes*, should be masculine and not feminine.*

ON SOME NEW SPECIES OF BALANININI, TYCHIINI AND RELATED TRIBES.

BY THOS. L. CASEY, WASHINGTON, D. C.

A recent rearrangement of my somewhat extensive material in the genus *Balaninus*, shows that we have been misinterpreting the species described by Say under the name *rectus*, which, as identified in most cabinets, is of slender form, with a thin and strongly arcuate rostrum, very abundant in Arizona, and, as represented by closely allied species, extending as far to the eastward as the Atlantic seaboard. The description of Say shows that the true *rectus* has a long and almost perfectly straight rostrum, bent downward only at tip. Two specimens from West Virginia before me undoubtedly represent this species, which is not at all closely related to the form which we have been calling *rectus*, but is more nearly allied to *quercus*. A desire to rectify this very radical error is the principal reason for publishing the following short study, in which quite a number of other species, hitherto undescribed, are also made known. A few Tychiini and related forms, believed to be new, are appended, in addition. Measurements exclude the rostrum, the length of the latter being the distance from the tip to the eyes in a straight line, or a chord of the arc.

Tribe BALANININI.

Balaninus Germ.

A—*Rostrum* (♀) *much longer than the body.*

**First funicular joint shorter than the second.*

B. hariolus n. sp.—Body slender, dark rufo-piceous throughout, the prothorax blackish; vestiture tawny-yellow, more hair-like and sparser at each side of the median line and on the flanks of the prothorax, rather

*Since this was written Dr. Blaisdell has published (Ent. News, 1910, p. 60) some additional notes on *Elcodes*, in which my suggestion given above has been carried out to some extent, four of his *formas* being given permanent rank as varieties. He seems however to be just a little hazy in his ideas concerning priority, stating that *nitidus* Csy., published many years ago, is a variety of *amplus* Blaisd., published in his monograph of 1909. The species name is of course *nitidus*, *amplus* becoming a variety of *nitidus* and not a species, if that be the true relationship between them. I may also add that there is no close relationship whatever between *dentipes* and *subcylindricus*, and the latter is clearly a distinct species.